(d) If the person making the inspection finds a deviation from the requirements of this part, the inspector shall immediately initiate remedial action.

NOTE TO §213.233: Except as provided in paragraph (b) of this section, no part of this section will in any way be construed to limit the inspector's discretion as it involves inspection speed and sight distance.

## § 213.234 Automated inspection of track constructed with concrete crossties.

- (a) General. Except for track described in paragraph (c) of this section, the provisions in this section are applicable on and after January 1, 2012. In addition to the track inspection required under §213.233, for Class 3 main track constructed with concrete crossties over which regularly scheduled passenger service trains operate, and for Class 4 and 5 main track constructed with concrete crossties, automated inspection technology shall be used as indicated in paragraph (b) of this section, as a supplement to visual inspection, by Class I railroads (including Amtrak), Class II railroads, other intercity passenger railroads, and commuter railroads or small governmental jurisdictions that serve populations greater than 50,000. Automated inspection shall identify and report exceptions to conditions described in §213.109(d)(4).
- (b) Frequency of automated inspections. Automated inspections shall be conducted at the following frequencies:
- (1) If annual tonnage on Class 4 and 5 main track and Class 3 main track with regularly scheduled passenger service, exceeds 40 million gross tons (mgt) annually, at least twice each calendar year, with no less than 160 days between inspections.
- (2) If annual tonnage on Class 4 and 5 main track and Class 3 main track with regularly scheduled passenger service is equal to or less than 40 mgt annually, at least once each calendar year.
- (3) On Class 3, 4, and 5 main track with exclusively passenger service, either an automated inspection or walking inspection must be conducted once per calendar year.
- (4) Track not inspected in accordance with paragraph (b)(1) or (b)(2) of this

- section because of train operation interruption shall be reinspected within 45 days of the resumption of train operations by a walking or automated inspection. If this inspection is conducted as a walking inspection, the next inspection shall be an automated inspection as prescribed in this paragraph.
- (c) Nonapplication. Sections of tangent track 600 feet or less constructed of concrete crossties, including, but not limited to, isolated track segments, experimental or test track segments, highway-rail crossings, and wayside detectors, are excluded from the requirements of this section.
- (d) Performance standard for automated inspection measurement system. The automated inspection measurement system must be capable of measuring and processing rail seat deterioration requirements that specify the following:
- (1) An accuracy, to within  $\frac{1}{8}$  of an inch:
- (2) A distance-based sampling interval, which shall not exceed five feet;
- (3) Calibration procedures and parameters assigned to the system, which assure that measured and recorded values accurately represent rail seat deterioration
- (e) Exception reports to be produced by system; duty to field-verify exceptions. The automated inspection measurement system shall produce an exception report containing a systematic listing of all exceptions to §213.109(d)(4), identified so that an appropriate person(s) designated as fully qualified under §213.7 can field-verify each exception.
- (1) Each exception must be located and field-verified no later than 48 hours after the automated inspection.
- (2) All field-verified exceptions are subject to all the requirements of this part.
- (f) Recordkeeping requirements. The track owner shall maintain and make available to FRA a record of the inspection data and the exception record for the track inspected in accordance with this paragraph for a minimum of two years. The exception reports must include the following:

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- (1) Date and location of limits of the inspection;
- (2) Type and location of each exception;
  - (3) Results of field verification; and
  - (4) Remedial action if required.
- (g) Procedures for integrity of data. The track owner shall institute the necessary procedures for maintaining the integrity of the data collected by the measurement system. At a minimum, the track owner shall do the following:
- (1) Maintain and make available to FRA documented calibration procedures of the measurement system that, at a minimum, specify an instrument verification procedure that ensures correlation between measurements made on the ground and those recorded by the instrumentation; and
- (2) Maintain each instrument used for determining compliance with this section such that it accurately measures the depth of rail seat deterioration in accordance with paragraph (d)(1) of this section.
- (h) Training. The track owner shall provide annual training in handling rail seat deterioration exceptions to all persons designated as fully qualified under §213.7 and whose territories are subject to the requirements of §213.234. At a minimum, the training shall address the following:
- (1) Interpretation and handling of the exception reports generated by the automated inspection measurement system:
- (2) Locating and verifying exceptions in the field and required remedial action; and
  - (3) Recordkeeping requirements.

[76 FR 18086, Apr. 1, 2011]

EFFECTIVE DATE NOTE: At 76 FR 55825, Sept. 19, 2011, §213.234 was amended by revising the first sentence of paragraph (a) and paragraphs (d), (e) and (g), effective November 8, 2011 For the convenience of the user, the revised text is set forth as follows:

## § 213.234 Automated inspection of track constructed with concrete crossties.

(a) General. Except for track described in paragraph (c) of this section, the provisions in this section are applicable on and after July 1, 2012. \* \* \*

\* \* \* \* \*

(d) Performance standard for automated inspection measurement system. The automated

inspection measurement system must be capable of indicating and processing rail seat deterioration requirements that specify the following:

- (1) An accuracy, to within 1/8 of an inch;
- (2) A distance-based sampling interval, which shall not exceed five feet; and
- (3) Calibration procedures and parameters assigned to the system, which assure that indicated and recorded values accurately represent rail seat deterioration.
- (e) Exception reports to be produced by system; duty to field-verify exceptions. The automated inspection measurement system shall produce an exception report containing a systematic listing of all exceptions to \$213.109(d)(4), identified so that an appropriate person(s) designated as fully qualified under \$213.7 can field-verify each exception.
- (1) Exception reports must be provided to or be made available to all persons designated as fully qualified under §213.7 and whose territories are subject to the requirements of \$213.234.
- (2) Each exception must be located and field-verified no later than 48 hours after the automated inspection.
- (3) All field-verified exceptions are subject to all the requirements of this part.
- (4) Exception reports must note areas identified between % of an inch and  $\frac{1}{2}$  of an inch as an "alert."

\* \* \* \* \* \*

- (g) Procedures for integrity of data. The track owner shall institute the necessary procedures for maintaining the integrity of the data collected by the measurement system. At a minimum, the track owner shall do the following:
- (1) Maintain and make available to FRA documented calibration procedures of the measurement system that, at a minimum, specify an instrument verification procedure that ensures correlation between measurements made on the ground and those recorded by the instrumentation; and
- (2) Maintain each instrument used for determining compliance with this section such that it accurately provides an indication of the depth of rail seat deterioration in accordance with paragraph (d)(1) of this section.

\* \* \* \* \* \*

## §213.235 Inspection of switches, track crossings, and lift rail assemblies or other transition devices on moveable bridges.

(a) Except as provided in paragraph (c) of this section, each switch, turnout, track crossing, and moveable